

MICROBIOLOGICAL ASSOCIATES

Division of DYNASCIENCES Corporation



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September 13, 1974

To: Dr. John Kreisher
Associate Scientific Director
Council for Tobacco Research U.S.A., Inc.
110 East 59th Street
New York, New York 10022

From: Dr. Bernard Sass

Subject: Consultation with Dr. Ralph Powell --
National Institutes of Health

Dr. Powell and I reviewed some lung sections from aged BALB/c mice suspected of having emphysema. We also discussed methods of fixation and perfusion of lungs. Whole human lung sections some of which demonstrated emphysema were viewed. Perfusion of human lungs with gluteraldehyde in a tank with a continuous flow constant pressure pump driven system was also demonstrated.

After examining some of the slides the following points were made:

1. Currently, emphysema is defined as both overdistention of alveoli and destruction of their walls.
2. Care must be taken not to misinterpret discontinuity due to small airways (i.e. alveolar ducts) as emphysema.
3. Emphysema was believed present in some of the slides examined.
4. Dr. Powell believed this project had merit, but more refinements were needed. These included:

1. Maintenance of constant pressure when inflating the lungs.
2. Further consultations to evaluate the degree of emphysema present.

BS:pop

cc: Dr. R.M. Nims
Dr. R. Powell, NIH
Dr. H. L. Stewart, NCI
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